SEQUENCE LISTING

<110> Avalon Pharmaceuticals, Inc.

<120> Amplified Cancer Target Genes Useful in Diagnosis and Therapeutic Screening

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<150> 60/434,918
<151> 2002-12-20

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Ala Lys Lys Glu Asp Ile Asn Leu Ser Val Arg Lys Leu Leu Asn Arg
35 40 45

His Asn Ile Val Phe Gly Asp Tyr Thr Trp Thr Glu Phe Asp Glu Pro
50 55 60

Phe Leu Thr Arg Asn Val Gln Ser Val Ser Ile Ile Asp Thr Glu Leu
65 70 75 80

Lys Val Lys Asp Ser Gln Pro Ile Asp Leu Ser Ala Cys Thr Val Ala
85 90 95

Leu His Ile Phe Gln Leu Asn Glu Asp Gly Pro Ser Ser Glu Asn Leu
100 105 110

Glu Glu Glu Thr Glu Asn Ile Ile Ala Ala Asn His Trp Val Leu Pro
115 120 125

Ala Ala Glu Phe His Gly Leu Trp Asp Ser Leu Val Tyr Asp Val Glu
130 135 140

Val Lys Ser His Leu Leu Asp Tyr Val Met Thr Thr Leu Leu Phe Ser
145 150 155 160

Asp Lys Asn Val Asn Ser Asn Leu Ile Thr Trp Asn Arg Val Val Leu
165 170 175

Leu His Gly Pro Pro Gly Thr Gly Lys Thr Ser Leu Cys Lys Ala Leu
180 185 190

Ala Gln Lys Leu Thr Ile Arg Leu Ser Ser Arg Tyr Arg Tyr Gly Gln
195 200 205

Leu Ile Glu Ile Asn Ser His Ser Leu Phe Ser Lys Trp Phe Ser Glu
210 215 220

Ser Gly Lys Leu Val Thr Lys Met Phe Gln Lys Ile Gln Asp Leu Ile
225 230 235 240

Asp Asp Lys Asp Ala Leu Val Phe Val Leu Ile Asp Glu Val Glu Ser
245 250 255

Leu Thr Ala Ala Arg Asn Ala Cys Arg Ala Gly Thr Glu Pro Ser Asp
260 265 270

Ala Ile Arg Val Val Asn Ala Val Leu Thr Gln Ile Asp Gln Ile Lys
275 280 285

Arg His Ser Asn Val Val Ile Leu Thr Thr Ser Asn Ile Thr Glu Lys
290 295 300

Ile Asp Val Ala Phe Val Asp Arg Ala Asp Ile Lys Gln Tyr Ile Gly
305 310 315 320

Pro Pro Ser Ala Ala Ala Ile Phe Lys Ile Tyr Leu Ser Cys Leu Glu
325 330 335

Glu Leu Met Lys Cys Gln Ile Ile Tyr Pro Arg Gln Gln Leu Leu Thr
340 345 350

Leu Arg Glu Leu Glu Met Ile Gly Phe Ile Glu Asn Asn Val Ser Lys
355 360 365

Leu Ser Leu Leu Leu Asn Asp Ile Ser Arg Lys Ser Glu Gly Leu Ser
370 375 380

Gly Arg Val Leu Arg Lys Leu Pro Phe Leu Ala His Ala Leu Tyr Val
385 390 395 400

Gln Ala Pro Thr Val Thr Ile Glu Gly Phe Leu Gln Ala Leu Ser Leu
405 410 415

Ala Val Asp Lys Gln Phe Glu Glu Arg Lys Lys Leu Ala Ala Tyr Ile
420 425 430

<210> 8
<211> 552
<212> PRT
<213> Artificial

<220>
<223> Putative Protein Derived from cDNA.

<400> 8
Ser Cys Ala Ser Cys Pro Trp Arg Arg Arg Arg Arg Ala Arg Gly Gly
1 5 10 15

Gly Trp Glu Gln Leu Ala Pro Gly Arg Thr Leu Ala Ala Thr Ala Pro
20 25 30

Trp Pro Trp Leu Ala Ala Arg Ala Arg Cys Ala Glu Val Ala Glu Leu
35 40 45

Ala Gly Pro Arg Arg Lys Arg Gly Glu Ala Gly Pro Arg Gln Glu Val
50 55 60

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Ala Leu Pro Gly Pro Ser Ala Ser Gly Ser Gly Gly Gly Ala Pro Arg
65                  70                  75                  80

Ala Ala Asp Ser Lys Leu Gly Arg Gly Pro Arg Ala Glu Ala Ala Ala
                85                  90                  95

Val Ala Ala Thr Leu Gly Val Arg Trp Arg Arg Pro Arg Pro Gly Trp
            100                 105                 110

Val Pro Thr Ala Leu Gly Gly Ala Met Asp Glu Ala Val Gly Asp Leu
        115                 120                 125

Lys Gln Ala Leu Pro Cys Val Ala Glu Ser Pro Thr Val His Val Glu
    130                 135                 140

Val His Gln Arg Gly Ser Ser Thr Ala Lys Lys Glu Asp Ile Asn Leu
145                 150                 155                 160

Ser Val Arg Lys Leu Leu Asn Arg His Asn Ile Val Phe Gly Asp Tyr
                165                 170                 175

Thr Trp Thr Glu Phe Asp Glu Pro Phe Leu Thr Arg Asn Val Gln Ser
            180                 185                 190

Val Ser Ile Ile Asp Thr Glu Leu Lys Val Lys Asp Ser Gln Pro Ile
        195                 200                 205

Asp Leu Ser Ala Cys Thr Val Ala Leu His Ile Phe Gln Leu Asn Glu
    210                 215                 220

Asp Gly Pro Ser Ser Glu Asn Leu Glu Glu Glu Thr Glu Asn Ile Ile
225                 230                 235                 240

Ala Ala Asn His Trp Val Leu Pro Ala Ala Glu Phe His Gly Leu Trp
                245                 250                 255

Asp Ser Leu Val Tyr Asp Val Glu Val Lys Ser His Leu Leu Asp Tyr
            260                 265                 270

Val Met Thr Thr Leu Leu Phe Ser Asp Lys Asn Val Asn Ser Asn Leu
        275                 280                 285

Ile Thr Trp Asn Arg Val Val Leu Leu His Gly Pro Pro Gly Thr Gly
    290                 295                 300

Lys Thr Ser Leu Cys Lys Ala Leu Ala Gln Lys Leu Thr Ile Arg Leu
305                 310                 315                 320

Ser Ser Arg Tyr Arg Tyr Gly Gln Leu Ile Glu Ile Asn Ser His Ser
                325                 330                 335

Leu Phe Ser Lys Trp Phe Ser Glu Ser Gly Lys Leu Val Thr Lys Met
            340                 345                 350

Phe Gln Lys Ile Gln Asp Leu Ile Asp Asp Lys Asp Ala Leu Val Phe
        355                 360                 365

Val Leu Ile Asp Glu Val Glu Ser Leu Thr Ala Ala Arg Asn Ala Cys
```

370 375 380

Arg Ala Gly Thr Glu Pro Ser Asp Ala Ile Arg Val Val Asn Ala Val
385 390 395 400

Leu Thr Gln Ile Asp Gln Ile Lys Arg His Ser Asn Val Val Ile Leu
405 410 415

Thr Thr Ser Asn Ile Thr Glu Lys Ile Asp Val Ala Phe Val Asp Arg
420 425 430

Ala Asp Ile Lys Gln Tyr Ile Gly Pro Pro Ser Ala Ala Ala Ile Phe
435 440 445

Lys Ile Tyr Leu Ser Cys Leu Glu Glu Leu Met Lys Cys Gln Ile Ile
450 455 460

Tyr Pro Arg Gln Gln Leu Leu Thr Leu Arg Glu Leu Glu Met Ile Gly
465 470 475 480

Phe Ile Glu Asn Asn Val Ser Lys Leu Ser Leu Leu Leu Asn Asp Ile
485 490 495

Ser Arg Lys Ser Glu Gly Leu Ser Gly Arg Val Leu Arg Lys Leu Pro
500 505 510

Phe Leu Ala His Ala Leu Tyr Val Gln Ala Pro Thr Val Thr Ile Glu
515 520 525

Gly Phe Leu Gln Ala Leu Ser Leu Ala Val Asp Lys Gln Phe Glu Glu
530 535 540

Arg Lys Lys Leu Ala Ala Tyr Ile
545 550

<210> 9
<211> 295
<212> PRT
<213> Artificial

<220>
<223> Putative Protein Derived from cDNA.

<400> 9
Ser Cys Ala Ser Cys Pro Trp Arg Arg Arg Arg Arg Ala Arg Gly Gly
1 5 10 15

Gly Trp Glu Gln Leu Ala Pro Gly Arg Thr Leu Ala Ala Thr Ala Pro
20 25 30

Trp Pro Trp Leu Ala Ala Arg Ala Arg Cys Ala Glu Val Ala Glu Leu
35 40 45

Ala Gly Pro Arg Arg Lys Arg Gly Glu Ala Gly Pro Arg Gln Glu Val
50 55 60

Ala Leu Pro Gly Pro Ser Ala Ser Gly Ser Gly Gly Gly Ala Pro Arg
65 70 75 80

```
Ala Ala Asp Ser Lys Leu Gly Arg Gly Pro Arg Ala Glu Ala Ala Ala
                85                  90                  95

Val Ala Ala Thr Leu Gly Val Arg Trp Arg Arg Pro Arg Pro Gly Trp
            100                 105                 110

Val Pro Thr Ala Leu Gly Gly Ala Met Asp Glu Ala Val Gly Asp Leu
        115                 120                 125

Lys Gln Ala Leu Pro Cys Val Ala Glu Ser Pro Thr Val His Val Glu
    130                 135                 140

Val His Gln Arg Gly Ser Ser Thr Ala Lys Lys Glu Asp Ile Asn Leu
145                 150                 155                 160

Ser Val Arg Lys Leu Leu Asn Arg His Asn Ile Val Phe Gly Asp Tyr
                165                 170                 175

Thr Trp Thr Glu Phe Asp Glu Pro Phe Leu Thr Arg Asn Val Gln Ser
            180                 185                 190

Val Ser Ile Ile Asp Thr Glu Leu Lys Val Lys Asp Ser Gln Pro Ile
        195                 200                 205

Asp Leu Ser Ala Cys Thr Val Ala Leu His Ile Phe Gln Leu Asn Glu
    210                 215                 220

Asp Gly Pro Ser Ser Glu Asn Leu Glu Glu Glu Thr Glu Asn Ile Ile
225                 230                 235                 240

Ala Ala Asn His Trp Val Leu Pro Ala Ala Glu Phe His Gly Leu Trp
                245                 250                 255

Asp Ser Leu Val Tyr Asp Val Glu Val Lys Ser His Leu Leu Asp Tyr
            260                 265                 270

Val Met Thr Thr Leu Leu Phe Ser Asp Lys Asn Val Asn Ser Asn Leu
        275                 280                 285

Ile Thr Pro Pro Pro Ser Pro
    290                 295
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<210> 10
<211> 279
<212> PRT
<213> Artificial

<220>
<223> Putative Protein Derived from cDNA.

<400> 10

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Met Thr Thr Leu Leu Phe Ser Asp Lys Asn Val Asn Ser Asn Leu Ile
1               5                  10                  15

Thr Trp Asn Arg Val Val Leu Leu His Gly Pro Pro Gly Thr Gly Lys
            20                  25                  30
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Thr Ser Leu Cys Lys Ala Leu Ala Gln Lys Leu Thr Ile Arg Leu Ser
35 40 45

Ser Arg Tyr Arg Tyr Gly Gln Leu Ile Glu Ile Asn Ser His Ser Leu
50 55 60

Phe Ser Lys Trp Phe Ser Glu Ser Gly Lys Leu Val Thr Lys Met Phe
65 70 75 80

Gln Lys Ile Gln Asp Leu Ile Asp Asp Lys Asp Ala Leu Val Phe Val
85 90 95

Leu Ile Asp Glu Val Glu Ser Leu Thr Ala Ala Arg Asn Ala Cys Arg
100 105 110

Ala Gly Thr Glu Pro Ser Asp Ala Ile Arg Val Val Asn Ala Val Leu
115 120 125

Thr Gln Ile Asp Gln Ile Lys Arg His Ser Asn Val Val Ile Leu Thr
130 135 140

Thr Ser Asn Ile Thr Glu Lys Ile Asp Val Ala Phe Val Asp Arg Ala
145 150 155 160

Asp Ile Lys Gln Tyr Ile Gly Pro Pro Ser Ala Ala Ala Ile Phe Lys
165 170 175

Ile Tyr Leu Ser Cys Leu Glu Glu Leu Met Lys Cys Gln Ile Ile Tyr
180 185 190

Pro Arg Gln Gln Leu Leu Thr Leu Arg Glu Leu Glu Met Ile Gly Phe
195 200 205

Ile Glu Asn Asn Val Ser Lys Leu Ser Leu Leu Leu Asn Asp Ile Ser
210 215 220

Arg Lys Ser Glu Gly Leu Ser Gly Arg Val Leu Arg Lys Leu Pro Phe
225 230 235 240

Leu Ala His Ala Leu Tyr Val Gln Ala Pro Thr Val Thr Ile Glu Gly
245 250 255

Phe Leu Gln Ala Leu Ser Leu Ala Val Asp Lys Gln Phe Glu Glu Arg
260 265 270

Lys Lys Leu Ala Ala Tyr Ile
275

<210> 11
<211> 431
<212> PRT
<213> Artificial

<220>
<223> Putative Protein Derived from cDNA.

<400> 11
Val Leu Leu Pro Gly Val Gly Gly Thr Gln Arg Arg Gly Gln Thr Phe

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1               5                   10                  15

Thr Asp Pro Pro Tyr Val His Gly Gly Trp Ile Glu Val Ser Thr Ala
            20                  25                  30

Lys Lys Glu Asp Ile Asn Leu Ser Val Arg Lys Leu Leu Asn Arg His
        35                  40                  45

Asn Ile Val Phe Gly Asp Tyr Thr Trp Thr Glu Phe Asp Glu Pro Phe
    50                  55                  60

Leu Thr Arg Asn Val Gln Ser Val Ser Ile Ile Asp Thr Glu Leu Lys
65                  70                  75                  80

Val Lys Asp Ser Gln Pro Ile Asp Leu Ser Ala Cys Thr Val Ala Leu
                85                  90                  95

His Ile Phe Gln Leu Asn Glu Asp Gly Pro Ser Ser Glu Asn Leu Glu
            100                 105                 110

Glu Glu Thr Glu Asn Ile Ile Ala Ala Asn His Trp Val Leu Pro Ala
        115                 120                 125

Ala Glu Phe His Gly Leu Trp Asp Ser Leu Val Tyr Asp Val Glu Val
    130                 135                 140

Lys Ser His Leu Leu Asp Tyr Val Met Thr Thr Leu Leu Phe Ser Asp
145                 150                 155                 160

Lys Asn Val Asn Ser Asn Leu Ile Thr Trp Asn Arg Val Val Leu Leu
                165                 170                 175

His Gly Pro Pro Gly Thr Gly Lys Thr Ser Leu Cys Lys Ala Leu Ala
            180                 185                 190

Gln Lys Leu Thr Ile Arg Leu Ser Ser Arg Tyr Arg Tyr Gly Gln Leu
        195                 200                 205

Ile Glu Ile Asn Ser His Ser Leu Phe Ser Lys Trp Phe Ser Glu Ser
    210                 215                 220

Gly Lys Leu Val Thr Lys Met Phe Gln Lys Ile Gln Asp Leu Ile Asp
225                 230                 235                 240

Asp Lys Asp Ala Leu Val Phe Val Leu Ile Asp Glu Val Glu Ser Leu
                245                 250                 255

Thr Ala Ala Arg Asn Ala Cys Arg Ala Gly Thr Glu Pro Ser Asp Ala
            260                 265                 270

Ile Arg Val Val Asn Ala Val Leu Thr Gln Ile Asp Gln Ile Lys Arg
        275                 280                 285

His Ser Asn Val Val Ile Leu Thr Thr Ser Asn Ile Thr Glu Lys Ile
    290                 295                 300

Asp Val Ala Phe Val Asp Arg Ala Asp Ile Lys Gln Tyr Ile Gly Pro
305                 310                 315                 320
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Pro Ser Ala Ala Ala Ile Phe Lys Ile Tyr Leu Ser Cys Leu Glu Glu
                325                 330                 335

Leu Met Lys Cys Gln Ile Ile Tyr Pro Arg Gln Gln Leu Leu Thr Leu
            340                 345                 350

Arg Glu Leu Glu Met Ile Gly Phe Ile Glu Asn Asn Val Ser Lys Leu
        355                 360                 365

Ser Leu Leu Leu Asn Asp Ile Ser Arg Lys Ser Glu Gly Leu Ser Gly
    370                 375                 380

Arg Val Leu Arg Lys Leu Pro Phe Leu Ala His Ala Leu Tyr Val Gln
385                 390                 395                 400

Ala Pro Thr Val Thr Ile Glu Gly Phe Leu Gln Ala Leu Ser Leu Ala
                405                 410                 415

Val Asp Lys Gln Phe Glu Glu Arg Lys Lys Leu Ala Ala Tyr Ile
            420                 425                 430
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